# BUSINESS OBJECTS QUERY AND REPORTING TOOL

## **DEPLOYMENT PLAN**

2 December 2002

## **VERSION DATES OF PLAN\***

Original Plan, dated 21 Feb 01

Revision One, dated 25 Jul 01 (Security and license changes)

Revision Two, dated 27 Aug 01 (Added Appendix C)

Revision Three, dated 11 Oct 01 (Revised to incorporate Appendix C into the document, revised Appendix A and B and deleted Appendix C)

Revision Four, dated 19 Nov 01 (Revised Appendix A to update license numbers)

Revision Five, dated 30 Jan 02 (Revised to add NAF References to Plan, revised Appendix A, added Appendix C - NAF distribution of licenses)

Revision Six, dated 12 Feb 02 (Revised to further break out distribution of licenses for Air Staff)

Revision Seven, dated 25 Mar 02 (Revised to redistribute PACAF licenses)

Revision Eight, dated 17 Apr 02 (Revised to add HQ AFCA)

Revision Nine, dated 2 Dec 02 (Revised to update license numbers)

<sup>\*(</sup>See Summary of Changes Document for Detailed Information)

#### BUSINESS OBJECTS DEPLOYMENT PLAN

#### 1 PURPOSE

The purpose of this plan is to identify the high-level requirements and sequence of events necessary to deploy Business Objects software and the associated Air Force repositories. Business Objects was chosen as the Air Force business intelligence tool to answer the ad-hoc query and reporting needs of end users at all levels down to and including base-level civilian personnel flights (CPFs) and human resource offices (HROs). The objective of deploying this tool is to replace the existing legacy DESIRE (Direct English System Information Retrieval) and Atlas functionality as we convert to the modern Defense Civilian Personnel Data System (DCPDS). While DESIRE and Atlas were tied to specific systems, Business Objects provides a simplified interface that allows users to execute in-depth database queries against a variety of database sources without requiring the user to understand the processes that lie underneath.

### 1.1 Deployment Definition

- **1.1.1 General Deployment Information.** Deployment consists of all actions necessary to distribute and implement Business Objects software and Air Force repositories throughout the Air Force Civilian Personnel community. Deployment includes, but is not limited to Business Objects software and hardware configuration, data, security and training of personnel in the use of the system.
- **1.1.2 Business Objects Software Component Definitions**. This software deployment contains commercial off-the-shelf (COTS) software and Air Force developed components.
  - **1.1.2.1 Business Objects Software.** The suite contains six basic modules: Supervisor, Designer, Reporter (also called Full Client), Broadcast Agent, WebIntelligence and InfoView.
    - **1.1.2.1.1 Supervisor Module.** This area of the repository is used to store the information about the users and the groups they belong to, the universes the user has access to, and the documents the users can share.
    - **1.1.2.1.2 Designer Module.** This module enables developers to create and manage the display of data into terms the personnel community can understand. This display is called a universe.
    - 1.1.2.1.3 Business Objects Reporter Module. Referred to as the full client, this is the module that allows users to drag and drop universe objects (dimensions, measures, and details) onto a blank 'Result Objects' screen and create ad-hoc queries and prepare reports. The users will also be able to access one or more corporate document domains containing standard reports created by AFPC or execute locally developed reports. Non-appropriated fund (NAF) users will also have access to standard reports created by the Air Force Services Agency (AFSVA).

- **1.1.2.1.4 Broadcast Agent Module**. This module allows users to automatically process and publish documents via the repository, an intranet, extranet, or the web. End users can schedule documents for processing and distribution at specific times, including off-peak periods, thereby reducing network traffic congestion. Documents can be set up so information is made available to recipients determined by his or her particular user profile.
- **1.1.2.1.5 WebIntelligence.** Referred to as WebI, this module can be loaded onto one or multiple servers. Authorized users can use browser software to view documents, create queries and publish reports to the document domain without having the Business Objects client loaded on their local PCs.
- **1.1.2.1.6 InfoView.** This product enables end users the ability to view, refresh, manage, print or schedule documents via their browsers. While AFPC and AFSVA did not include this product in the original purchase, future purchases will include consideration for this product for users who only need to view data and do not need ad-hoc capability.
- **1.1.2.2 Air Force Repositories**. In addition to the software deployment, repositories will be deployed to the regional and CPF UNIX servers. The repository is a database stored in a relational database management system such as Oracle. The repository is used by various Business Objects products and modules to secure access to the data and provide the infrastructure for the Business Objects applications. This repository is a separate and distinct entity from the database the users will access to build documents and perform analysis. The repository will contain the following domains:
  - **1.1.2.2.1 Universe Domain**. AFPC will develop and deploy multiple universes. A universe is defined as a business-oriented mapping of the data structure found in databases: tables, columns, joins, etc. A universe domain is defined as the area of the repository that holds exported universes. Each proposed domain will be covered in detail in paragraph 4.4.2.3, Universe Domain, of this document.
  - **1.1.2.2.2 Security Domain**. This is the area of the repository that stores user profiles as well as a registry that lists other domains and their access paths. Paragraph 4.4.2.2.2 Security Schema, details the security that will be implemented in all AFPC developed products.
  - **1.1.2.2.3 Document Domain**. The area of the repository that holds published corporate documents. The document domain makes it possible to store and distribute documents.

#### 2 SYSTEM ARCHITECTURE

#### 2.1 HARDWARE

**2.1.1 AFPC Servers.** AFPC will have servers dedicated to hosting the various query databases and Business Objects repositories, WebIntelligence, and Broadcast Agent. Business Objects uses Common Object Request Broker Architecture (CORBA) technology, which allows the distribution of the processing tasks over several different physical machines. Instead of having a single WebIntelligence server or a single primary BROADCAST AGENT server, we can have multiple WebIntelligence servers and multiple BROADCAST AGENT servers. This technology provides load balancing (adding servers to 'share' the load when capacity requirements dictate) and fail over (when one server fails, another server takes over automatically).

**2.1.2 CPF/HRO Servers.** AFPC will push the standard HR reporting repository and certain Air Force unique data not available in the standard DoD CSU database (i.e., experience data) to each CPF/HRO UNIX server. Only the records that belong to a particular CPF/HRO are pushed to each CPF/HRO UNIX server. While we will attempt to make as much data available at the local level, it may not be practical to include certain data (e.g., legacy history data) that would be infrequently accessed by the local CPF/HRO user.

#### 3 DEPLOYMENT IMPLEMENTATION ROLES AND RESPONSIBILITIES

## 3.1 Air Force Personnel Center (AFPC/DPC)

AFPC/DPC has operational program management responsibility for planning, coordination, oversight, and execution of the Business Objects software deployment program as prescribed by this plan. The Air Force purchased the licenses to operate Business Objects Full Client/Web Intelligence software and will distribute these according to Appendix A—license distribution for NAF users is reflected in Appendix C. AFPC will also augment, within time and staff limitations, training at the personnel school at Gunter AFB. AFPC will distribute timely software upgrades and patches within the scope of the Air Force Business Objects contract. AFPC will distribute corrections, additions, and modifications to Regional universes developed for Air Force requirements on a periodic basis. The universe will be "version" controlled with quarterly releases planned. Suggested changes will normally be completed within one release.

## 3.2 Major Command (MAJCOM)

The MAJCOM has technical oversight and responsibility for the design, development, and deployment of command-unique universes with some technical assistance provided by AFPC.

#### 3.3 CPFs/HROs (Civilian Personnel Flights/Human Resource Offices)

Bases will be responsible for loading Business Objects software and subsequent releases and patches provided by AFPC or AFSVA within the framework of the Air Force Business Objects contract. Bases are responsible for requesting assistance in software and patch loads when necessary.

#### 3.4 AF/DPPR

AF/DPPR has technical oversight and responsibility for the design, development, and deployment of unique universes that support non-personnel requests for data, with some technical assistance provided by AFPC/DPC.

#### 4 DEPLOYMENT STRATEGY

#### 4.1 Pilot Project Deployment

AFPC will initially deploy the software and test universe for purposes of fine-tuning the actual deployment. This pilot project will be as representative as possible of the entire project, and will be thoroughly tested before deployment. The IOC CPFs and HROs will be solicited to participate in the pilot project. Issues such as query performance and security will be tested. Lessons learned will enable AFPC to realistically plan the actual production deployment.

#### 4.2 Scope of Deployment

Business Objects software and the AFPC developed repositories will be deployed to provide the capability to query and report on the modern DCPDS and applicable unique AF applications by civilian personnel officials and HROs.

- **4.2.1 HQ Air Force**. With the Atlas capability being eliminated upon implementation of the modern DCPDS, it is anticipated that Business Objects and the universes will answer the majority of Air Force reporting needs. Full client users at Air Force level will be able to access the universes that will be developed and maintained by AFPC.
- **4.2.2 HQ AFPC**. HQ AFPC/DPCXO will develop, maintain, and deploy all Regional and CSU universe, security and document domains.
- **4.2.3 MAJCOM.** Each MAJCOM will be provided a copy of the Business Objects Full Client, Supervisor, and Designer modules. This will provide the capability for each MAJCOM to not only access the AFPC designed universes, but also create their own unique universes to answer their external and internal query/reporting needs.
- **4.2.4 CPFs/HROs.** The Business Objects full client software will be provided to each base in accordance with Appendix A and Appendix C. The universe and corporate document domains created and maintained at AFPC will be sent to each base initially and on a periodic basis as needed. The security domain will be managed by AFPC/DPCXO. The personal document domains will be unique to each CPF/HRO and will consist of locally created documents.

#### 4.3 Deployment Commencement

Commencement of the repository deployment to each MAJCOM and CPF/HRO will occur in concert with the deployment of the CSU database after the successful installation of the modern DCPDS. It is anticipated that AFPC will be able to remotely deploy the repositories directly to each of the CSU servers with minimal user intervention. The domains will reside on the same server as the modern DCPDS CSU data instance enabling us to utilize the same communications protocols and security standards as the modern DCPDS.

#### 4.4 Business Objects Software Installation And Repository Deployment

Each MAJCOM/CPF and HRO will be responsible for installing the Business Objects software and AFPC will deploy the repositories to each CSU.

#### 4.4.1 Business Objects Software Installation Guide.

Included with the software is an installation guide that spells out in detail the procedures for loading Business Objects modules. The licensing agreement governs the modules that can legally be loaded on PCs or on server machines. Product keys will be included with the software that 'selects' the authorized modules. Initial software distribution will be made upon approval of the attached distribution plans (Appendix A and Appendix C).

#### 4.4.2 Repository Deployment.

**4.4.2.1 General.** For modern DCPDS, AFPC will build and maintain a repository that will reside on the RSC query server located at AFPC. AFPC will deploy to each CPF UNIX server a copy of the repository. Portions of that repository will be updated on a periodic basis as required. Two connection 'strings' will be provided to enable users to report on their local CSU database instance or the Regional database instance depending upon the security provided in the Supervisor module of Business Objects. These two connection strings or SQL\*NET scripts, in a tnsnames.ora file, will provide the user access to the Oracle database instance on his or her local CSU or allow the user to report on data at higher levels (e.g. MAJCOM) based upon access privileges.

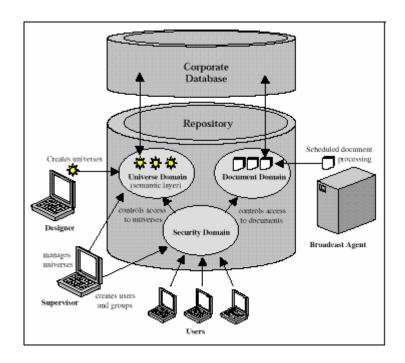


Figure 1. The Repository

#### 4.4.2.2 Security Domain.

**4.4.2.2.1 General.** AFPC will be the security manager for the repositories developed and maintained in-house. Where applicable, USERIDs will be imported directly from user tables maintained in the modern DCPDS. Passwords will be issued by AFPC. Users will be required to change passwords upon initial logon. AFPC will also employ a Business Objects security feature that enables 'row-level' checking, allowing the user to view only those records at his or her level of responsibility or below, according to the permissions assigned to the user. As an added precaution, the functionality of Business Objects that enables users to write or edit structured query language (SQL) will be disabled so that security cannot be compromised.

**4.4.2.2.2 Security Schema.** The USERID request form will specify the access required by the user. If the user requires access to data both at the CPF level and at the Regional level, only one USERID and password is required. That USERID's permissions will be set so that the user will be able to select between both Universes, i.e., their Local CSU Universe or the Regional CSU Universe. All users will require only one BOMAIN03.KEY. This key will enable the user to use the following: BO Client/Server, WebI and Broadcast Agent (BCA). The key will be sent via e-mail to the POC in charge of installing the Business Objects software and must be installed on the local PC where the full client software is loaded. Specific instructions on how to set up the connection will be provided with the appropriate tnsnames.ora entries and BOMAIN03.KEY.

#### 4.4.2.3 Universe Domain.

This portion of the repository is the data map that points to the related CSU database instance. The same basic database structure will exist at the corporate level, the regional level and at the CPF/HRO level which enables us to easily point customers to the data they need at the level they require. AFPC will deploy Air Force reporting universes as follows:

- **4.4.2.3.1 HQ USAF, AFPC, MAJCOMs and FOAs.** These customers will have the choice of using the HR Reporting Universe pointing to the AFPC RSC query database server or accessing the HR Reporting Universe pointing to the Corporate Management Information System (CMIS). Distinctions between these universes are listed below:
- **4.4.2.3.1.1 AFPC HR Reporting Universe**. In addition to including all the columns of data available in the standard DoD CSU database, this universe will contain Air Force unique data such as employee experience data, personnel accounting symbol (PAS) data, "legacy CJ" type data from modern DCPDS, and Personnel Action (RPA) data. Any requests for enhancements (i.e., additional data, measures, filters, etc) or reports of problems (incorrect measures, calculations, invalid reports, etc) within the universe need to be centrally controlled and tracked.
- **4.4.2.3.1.2 CMIS HR Reporting Universe**. Data will be restricted to what is available in the standard DoD CSU database. Users will have access to all records they own or service.
- **4.4.2.3.1.3 MAJCOM Unique Universes.** MAJCOMs may develop and maintain their own unique data marts (universes) to which only they have access.
- **4.4.2.3.2 Interim Centers.** Interim centers servicing multiple bases may access the HR Reporting universe residing on a server at AFPC.
- **4.4.2.3.3 Base Level (CPF).** An extract of the AFPC HR reporting universe will be deployed to and reside on the same server as the CSU instance at each CPF. If the CPF requires data at AFPC level, access to the AFPC HR reporting universe will be added to their user permissions. See paragraph 4.4.2.2.2.

#### 4.4.2.4 Document Domain.

**4.4.2.4.1 General.** This portion of the repository contains all of the shared documents. This domain will require the most disk space as reports require

additional space for document formats. The average size of a Business Objects document is approximately 2.5 MB.

**4.4.2.4.1.1** Corporate Document Domain. AFPC will publish generic, standard reports to a Corporate Document domain that can be accessed by users. To ensure data security and sensitivity, these documents will be 'saved' without the data included with the option to refresh upon open. As soon as the user opens the document, the data will refresh from the CSU based on the USERID and password assigned by the Supervisor, thus restricting the user to only the data he or she is authorized access to.

**4.4.2.4.1.2 Personal Document Domain.** Users will also be able to create and save reports to their local hard drives or send reports to other Business Objects users.

#### 4.4.3 Middleware Requirements.

**4.4.3.1 General** (Reference Oracle Database Guide, Windows/Unix, Version 5.0). In order for Business Objects to connect to the database servers, middleware must be loaded and configured on every client machine at Regional/MAJCOM/CPF/HRO where Business Objects client software will be loaded. When a connection is made, the middleware enables Business Objects to access, share, and store data on database servers over a network.

**4.4.3.2 Loading Instructions**. The deployed repositories/universes will access Oracle 7 databases and use the Oracle Client driver (7.3.2), installed when Business Objects is loaded onto the client machines. Specific loading/configuration instructions will be included with the software.

#### 4.5 Deployment Assistance Teams

#### 4.5.1 AFPC Responsibilities.

- Serve as experts and advisors on the functions and operation of Business Objects software and domains to ensure its successful deployment and operation throughout the RSC and associated CPFs and HROs.
- Ensure that the software and domains installed at the region or CPFs/HROs meet all specified operational and functional requirements are fully operational.
- Accept new problem reports via the Clearinghouse application, and allow users to research status of existing problems.
- Accept enhancement requests from customers. Enhancements may be requested via email or AF Form 1945. All base requests for enhancement should be approved by their MAJCOM before being forwarded to AFPC. Requests are assigned control numbers and tracked via a spreadsheet that is available on the AFPC/DPC website.

• Evaluate success of training given to personnelists at the region on the functionality and operation of the Business Objects software and associated domains.

## 4.6 Deployment Schedule Changes

Deployment schedules may change as factors and events affecting the site preparation and equipment readiness also change. Changes to previously scheduled and reported deployment data should be reported immediately through the POCs to the AFPC deployment POC. Timely notification of deployment schedule changes ensures availability of AFPC staff, and equipment resources needed to support the deployment requirements.

#### 5 TRAINING

AFPC and the Civilian Personnel School at Gunter will develop a Training Support Plan that outlines the training requirements for the Business Objects software. AFSVA will work in conjunction with AFPC to develop a Training Support Plan that meets the needs of NAF users.

#### 6 SECURITY

#### 6.1 Security Goals

The Business Objects software security program goal is the protection, integrity, confidentiality, and availability of the Business Objects software and associated data. Data processed by Business Objects software is considered to be sensitive-unclassified which necessitates controlled access to both it and the underlying tables to which Business Objects universes connect. Deployment site security administrators, who may also be referred to as Information System Security Officers (ISSOs) or Computer System Security Officers (CSSOs), must ensure compliance with all security requirements referenced in the Security Support Plan. Components must ensure each deployment site ISSO or CSSO has implemented all required security controls, policies, and procedures before Business Objects software deployment to limit access to the Business Objects software only to authorized users and to prevent unauthorized modification, destruction, or disclosure of sensitive data processed accessed by the Business Objects software. Local system and security administrators must be alert to any proposed changes to the hardware or software configuration supporting the Business Objects software that may affect the security of the database.

## **6.2** Security References

All data processing, transmission, retrieval, and the computer and communication resources associated with the Business Objects software must be managed and administered according to applicable DoD security directives, and the Privacy Act of 1974. The Business Objects software security protection program requirements apply to all Business Objects software end users at all levels. End users include all personnelists, database administrators, systems administrators, and any other staff members who use the Business Objects software.

## 6.3 User Access to Business Objects Software

AFPC will establish the Business Objects software authorization and access control processes for implementation in accordance with the provisions detailed in applicable security directives. The security concepts dictate that Business Objects software users are limited only to the minimum viewing and access privileges they need for their jobs. At this time, AFPC will issue controlled USERIDs and passwords for each authorized user of the Business Objects software. Requests for data access from organizations outside the Civilian Personnel/Human Resources community will be approved or disapproved by AF/DPPRS. Likewise, requests for access to data from the Civilian Personnel community, from any level, that is contrary to existing Air Staff policy, will also be approved or disapproved by AF/DPPRS.

#### 7 LICENSE DISTRIBUTION

Appropriated Fund. Distribution of Business Objects licenses is based upon civilian personnel manpower authorization numbers, which are determined by AF/DPPR. Distribution to the Civilian Personnel Flights (CPF) is 100% of the 2XXs authorized based on the FY01 servicing ratio, 100% coverage of the system administrators, 100% of AF/DP staff, 100% of MAJCOM DP staff and 100% LN specialists in the overseas locations. Business Objects licenses will also be purchased for users at certain other non-servicing MAJCOMs and unified commands. The servicing MAJCOMs may choose to redistribute within their command as appropriate, however, AFPC/DPCXO must be notified of the changes in distribution in order to administer and renew the licensing contracts with Business Objects. AFPC will maintain a master list of license distribution and request regular updates from the MAJCOMs. If other offices outside the CPF have approved access to personnel data or DCPDS and wish to procure their own software licenses, AFPC will request a copy of the license purchase and file it as documentation before releasing additional user accounts. Or, they can use the Microsoft Access tool for free.

Non-appropriated Fund (NAF). For NAF users, the proposed distribution of client and web licenses is illustrated in Appendix C. This distribution is based upon one client or web license for each HRO and one for each MAJCOM HRO representative. The MAJCOMs may choose to redistribute within their command as appropriate. However, AFSVA must be notified of the changes in distribution in order to administer and renew the licensing contracts with Business Objects. AFSVA will maintain a master list of license distribution and request regular updates from the MAJCOMs.

## APPENDIX A - SOFTWARE DISTRIBUTION LIST

APPENDIX A - S	<u> </u>			1101	PROJ			
				PROJ	FY01	# OF LICENSES	# <b>OF</b>	
				FY01	CSU	BASED ON 100%	SUPERVISOR	
			CPF	SVC	POP	OF CSU POP	/DESIGNER	# OF LICENSES FOR
BASE	ST	CMD	ID	POP	PLUS 1	PLUS Sys Admin	MODULES	LN EMPLOYEES
Barksdale AFB	LA	ACC	8E	1095	11	11		
Beale AFB	CA	ACC	40	562	7	7		
Cannon AFB	NM	ACC	4Q	384	5	5		
Davis-Monthan AFB	AZ	ACC	4V	1320	15	15		
Dyess AFB	TX	ACC	4X	359	5	5		
Ellsworth AFB	SD	ACC	4D	417	6	6		
Holloman AFB	NM	ACC	5C	858	11	11		
Langley AFB	VA	ACC	9B	2172	19	*21		
Minot AFB	ND	ACC	8O	482	6	6		
Moody AFB	GA	ACC	50	369	5	5		
Mountain-Home AFB	ID	ACC	5P	406	5	5		
Nellis AFB	NV	ACC	9H	849	10	10		
Offutt AFB	NE	ACC	8F	1336	15	15		
Seymour Johnson AFB	NC	ACC	5V	585	7	7		
Shaw AFB	SC	ACC	5W	469	6	6		
Whiteman AFB	MO	ACC	4K	606	8	8		
Altus AFB	OK	AETC	4L	1224	13	13		
Columbus AFB	MS	AETC	8G	438	6	6		
Goodfellow AFB	TX	AETC	5A	500	6	6		
Keesler AFB	MS	AETC	8V	1957	20	20		
Lackland AFB	TX	AETC	8Z	3847	46	46		
Laughlin AFB	TX	AETC	5E	890	9	9		
Little Rock AFB	AR	AETC	5F	402	5	5		
Luke AFB	AZ	AETC	7I	1005	11	11		
Maxwell AFB	AL	AETC	9Z	2211	22	22		
Randolph AFB	TX	AETC	9P	3388	30	30		
Sheppard AFB	TX	AETC	9U	1303	16	16		
Tyndall AFB	FL	AETC	7K	543	7	7		
Vance AFB	OK	AETC	5Y	96	2	2		
USAF Academy	CO	AFA	6W	1592	18	18		
Arnold AFS	TN	AFMC	8B	185	3	3		
Brooks AFB	TX	AFMC	4A	1441	16	16		
Edwards AFB	CA	AFMC	6Z	2891	28	28		
Eglin AFB	FL	AFMC	8I	4138	36	36		
Hanscom Field	MA	AFMC	7W	2466	24	24		
Hill AFB	UT	AFMC	8L	10431	70	74		
Kirtland AFB	NM	AFMC	8Y	2222	23	23		
L A AFB (SAMSO)	CA	AFMC	9D	1069	12	12		
Robins AFB	GA	AFMC	9R	12352	71	75		
Tinker AFB	OK	AFMC	9V	13278	77	82		
Wright-Patterson AFB	ОН	AFMC	9X	10738	62	66		
ARPC Denver	CO	AFRC	5H	429	5	5		
Dobbins AFB	GA	AFRC	6R	681	8	8		
Ft. Worth NAS	TX	AFRC	4R	586	7	7		
General Mitchell IAP	WI	AFRC	6M	452	6	6		
Grissom AFB	IN	AFRC	5B	710	9	9		
Homestead AFB	FL	AFRC	5D	638	8	8		
March AFB	CA	AFRC	5K	1196	12	12		
Minn-St. Paul	MN	AFRC	7S	382	5	5		
New Orleans NAS	LA	AFRC	6P	336	5	5		

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				BDO I	PROJ	# OF LICENSES	# OF	
				PROJ	FY01	# OF LICENSES	# OF SUPERVISOR	
			CPF	FY01 SVC	CSU POP	BASED ON 100% OF CSU POP	/DESIGNER	# OF LICENSES FOR
BASE	ST	CMD	ID	POP	PLUS 1	PLUS Sys Admin	MODULES	LN EMPLOYEES
Niagara Falls IAP-ARS	NY	AFRC	6Q	366	5	5	1102022	DIVERTIDO I DES
Pittsburgh	PA	AFRC	6T	407	5	5		
Portland	OR	AFRC	9W	239	4	4		
Westover AFB	MA	AFRC	42	996	11	11		
Willow Grove ARS	PA	AFRC	6L	336	5	5		
Youngstown MAP	OH	AFRC	6N	556	7	7		
Buckley ANGB	CO	AFSPC	6V	300	5	5		
F E Warren AFB	WY	AFSPC	4Z	472	6	6		
Malmstrom AFB	MT	AFSPC	5J	357	5	5		
Onizuka AFB	CA	AFSPC	7T	204	2	2		
Patrick AFB	FL	AFSPC	5R	1296	14	14		
Peterson AFB	CO	AFSPC	6X	2180	18	18		
Vandenberg AFB	CA	AFSPC	5Z	982	15	15		
Kelly AIA	TX	AIA	8X	1412	17	17		
Andrews AFB	DC	AMC	8Q	1131	11	11		
Charleston AFB	SC	AMC	4U	934	11	11		
Dover AFB	DE	AMC	4W	929	9	9		
Fairchild AFB	WA	AMC	4Y	377	5	5		
Grand Forks AFB	ND	AMC	60	318	4	4		
MacDill AFB	FL	AMC	5I	1078	10	10		
McChord AFB	WA	AMC	5M	954	8	8		
McConnell AFB	KS	AMC	7Q	368	5	5		
McGuire AFB	NJ	AMC	5N	1076	12	12		
Pope AFB	NC	AMC	5T	329	4	4		
Scott AFB	IL	AMC	9S	2333	20	20		
Travis AFB	CA	AMC	5X	1479	15	15		
Otis ANGB	MA	ANG	8P	26	2	2		
Selfridge ANGB	MI	ANG	41	1255	14	14	1	
Andersen AFB	Guam	PACAF	8D	404	12	*9	-	
Eielson AFB	AK	PACAF	9E	444	3	*6		
Elmendorf AFB	AK	PACAF	9M	928	20	*21		
Hickam AFB	HI	PACAF	90	1292	15	*18		
Kadena AB	Japan	PACAF	8T	635	21	*19		16
Kunsan AB	Korea	PACAF	9K	050		*1		1
Misawa AB	Japan	PACAF	9T	147	4	*4		5
Osan AB (Kunsan)	Korea	PACAF	9K	263	4	*4		9
Yokota AB	Japan	PACAF	9Y	315	11	*12		9
Aviano AB	Italy	USAFE	6Y	204	3	3		3
Incirlik AB	Turkey	USAFE	8S	212	3	3		3
Izmir	Turkey	USAFE	8K					2
Lajes	AZORES	USAFE	9A	726	15	15		3
Mildenhall RAF Sta	UK	USAFE	9G	573	8	8		4
Ramstein AB	Germany	USAFE	9N	1051	13	13		32
Spangdahlem AB	Germany	USAFE	7N	275	4	4		7
Sembach AB	Germany	USAFE	N/A	N/A	24	24		,
HQ Pentagon	DC		9L	4922	36	40	1	

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				PROJ FY01	PROJ FY01 CSU	# OF LICENSES	# OF SUPERVISOR	
			CPF	SVC	POP	BASED ON 100%	/DESIGNER	# OF LICENSES FOR
BASE	ST	CMD	ID	POP	PLUS 1	OF REQUIRED #	MODULES	LN EMPLOYEES
AF/AFPC/MAJCOMS								
HQ AF/CC	DC					1		
HQ AF/DAL	DC					3		
HQ AF/DP	DC					6		
HQ AF/DPD	DC					9		
HQ AF/DPE	DC					4		
HQ AF/DPFX	DC					34		
HQ AF/DPPR	DC					9		
HQ AF/DPR	DC					15		
SAF/AQ	DC					1		
SAF/AQ	TX					3		
AFSLMO	DC	1	1			9		
AFPOA	DC	1	1	+		6	2	
AFPC/DPC	TX					700	7	
AFPC/DPK	TX					150	/	
HQ AF/DPPRS	TX					42	2	
Civ Pers School	AL					42	1	
ACC	AL					40	1	
	37.4	ACC				*17	1	
(Langley AFB) AETC	VA	ACC	-	-		*1/	1	
	TV	AETC				1.4	1	
(Randolph AFB) AFCA	TX	AETC		-		14	1	
	IL	AECA				1		
(Scott AFB)	IL	AFCA	-	-		1		
USTRANSCOM	17	AECA				2		
(Scott AFB)	IL	AFCA	-	-		2		
AFMC	ОН	AFMC				15	1	
(Wright-Patterson AFB) AFRC	ОН	AFMC	-	-		45	1	
	C 4	AEDC				25	1	
(Robins AFB) AFSOC	GA	AFRC	-			35	1	
(HURLBURT FIELD)	EI	AEGOC				1	1	
AFSPC	FL	AFSOC	-	-		1	1	
(Peterson AFB)	СО	AFSPC				4	1	
AIA	CO	Arsrc		-		4	1	
	TX	A T A				(	1	
(Kelly AFB)	1.7.	AIA	-	-		6	1	
AMC (Scott AER)	п	AMC				10	1	
(Scott AFB) USAF Academy	IL	AMC	+	+		10	1	
	CO	LICATA				25	1	
(Colorado Springs) PACAF	CO	USAFA	+ +	+		25	1	
(Hickam AFB)	НІ	PACAF				*10	1	,
USAFE	ПІ	FACAF	+	+		*10	1	1
(Ramstein AB)	GE	USAFE				7	1	
	UL	USAFE	+ +	+		7 <b>2476</b>	25	0.5
TOTALS						24/6	25	95
*Totals per base or								
MAJCOM were								
reallocated by either MAJCOM or AFPC								
MAJCONI OI AITIC	l							

#### APPENDIX B. GLOSSARY OF TERMS AND ABBREVIATIONS

BROADCAST AGENT

Business Objects product that enables managers to set up and monitor the

batch or scheduled processing of documents.

BOMAIN.KEY A file that contains the address of the repository's security domain. This file

must be distributed to all users who will access the Business Objects repository to share universes and documents. By default, the BOMain.key is placed in the

Business Objects LocData folder on your system.

COTS Commercial Off the Shelf CM Configuration Management

CMIS Corporate Management Information System
CORBA Common Object Request Broker Architecture
CPMS Civilian Personnel Management Service
CSSO Computer System Security Officer

CSU Customer Support Unit

DETAIL Qualification for an object in a universe, a user object, local variable or a

column of data, that provides supplementary information on a dimension.

Always associated to a dimension.

DIMENSION Qualification for an object in a universe, a user object, a local variable or a

column of numeric data; enables you to build hierarchies and therefore to

perform analysis in drill mode.

DOCUMENT Business Objects file (extension .rep) that acts as container for reports.

DAA Designated Approving Authority

DCPDS Defense Civilian Personnel Data System

DoD Department of Defense

FOC Full Operating Capability. (FOC is attained when all DoD sites have moved

from the legacy system.)

HR Human Resources

HRO Human Resources Office IAW In accordance with

INFOVIEW Provides the core functionality of WebIntelligence.

ISSO Information System Security Officer

IOC Initial Operating Capability. (IOC is that point in time when the modern

system is installed and first begins operating in preparation for the Operational

Test and Evaluation (OT&E) phase.)

LAN Local Area Network

LOV A List of Values (LOV) is a file that contains the data values associated with

an object. LOV files allow end users to set conditions on objects, since they can see the exact format of the corresponding data values. LOV files are created using Business Objects Designer software. When a designer exports a universe to the universe domain, he or she can also export all the related LOV

files to the document domain.

MIDDLEWARE Client machines and database servers must be able to communicate with each

other. This functionality is provided by the database middleware.

APPENDIX B. GLOSSARY OF TERMS AND ABBREVIATIONS

MEASURE Qualification for an object in a universe, a user object, a local variable or a

column of data; measures return numeric data that is the result of a calculation

including an aggregate function.

NAF Non-Appropriated Funds

OBJECT Universe element that represents a set of data from a relational database in

terms that pertain to your business situation. Included in a query to retrieve

data from the database.

Oracle HR Oracle Human Resources

PAS Personnel Authorization System

RDBMS Relational Database Management System. Enables the creation, management,

and deployment of relational databases.

REPOSITORY Centralized storage and distribution mechanism that manages universes, user

information and document exchange.

RESUMIX COTS resume (staffing) system

RSC Regional Service Center SA Site Administrator

SECURED CONNECTION A connection used to centralize and control access to confidential and shared

data.

SECURITY DOMAIN The domain containing the USERID and password for logging onto a Business

Objects universe.

SQL Structured Query Language

SUPERVISOR User of Business Objects Supervisor software and responsible for user

administration information such as user names and passwords. The supervisor creates user rights and profiles. The person who manages Business Objects system resources, such as the repository, is referred to as "general supervisor".

TNSNAMES.ORA An Oracle file that stores local naming configuration data, including, service

names, network addresses and database identification information.

UNIVERSE Semantic layer between you and a database, consisting of classes and objects.

The objects in the universe map to data in the database, and enable you to

build queries on the universe when creating or working on reports.

UNIVERSE DOMAIN The area of the repository that holds exported universes. The universe domain

makes it possible to store, distribute, and administer universes. There may be

multiple universe domains in a repository.

WEBINTELLIGENCE WebIntelligence provides non-technical end users with ad hoc query, reporting

and analysis of information through a corporate Internet, extranet, or the World

Wide Web (WWW).

#### APPENDIX C - NON-APPROPRIATED FUND SOFTWARE DISTRIBUTION LIST

Base	State	Cmd	CCPO ID	Proj FY01 Svc Pop	Number of Licenses	Number of Supervisor/ Designer Modules
Barksdale AFB	LA	ACC	8E	294	1	
Beale AFB	CA	ACC	40	239	1	
Cannon AFB	NM	ACC	4Q	175	1	
Davis-Monthan AFB	AZ	ACC	4V	305	1	
Dyess AFB	TX	ACC	4X	159	1	
Ellsworth AFB	SD	ACC	4D	186	1	
Holloman AFB	NM	ACC	5C	312	1	
Langley AFB	VA	ACC	9B	493	1	
Minot AFB	ND	ACC	80	266	1	
Moody AFB	GA	ACC	50	176	1	
Mountain-Home AFB	ID	ACC	5P	212	1	
Nellis AFB	NV	ACC	9H	530	1	
Offutt AFB	NE	ACC	8F	277	1	
Seymour Johnson AFB	NC	ACC	5V	229	1	
Shaw AFB	SC	ACC	5W	235	1	
Whiteman AFB	MO	ACC	4K	178	1	
Altus AFB	OK	AETC	4L	226	1	
Columbus AFB	MS	AETC	8G	112	1	
Goodfellow AFB	TX	AETC	5A	179	1	
Keesler AFB	MS	AETC	8V	482	1	
Lackland AFB	TX	AETC	8Z	940	1	
Laughlin AFB	TX	AETC	5E	140	1	
Little Rock AFB	AR	AETC	5F	297	1	
Luke AFB	AZ	AETC	7I	305	1	
Maxwell AFB	AL	AETC	9Z	651	1	
Randolph AFB	TX	AETC	9P	445	1	
Sheppard AFB	TX	AETC	9U	450	1	
Tyndall AFB	FL	AETC	7K	290	1	
Vance AFB	OK	AETC	5Y	31	1	
USAF Academy	CO	AFA	6W	548	1	
Arnold AFS	TN	AFMC	8B	47	1	
Brooks AFB	TX	AFMC	4A	125	1	
Edwards AFB	CA	AFMC	6Z	321	1	
Eglin AFB	FL	AFMC	8I	586	1	
Hanscom Field	MA	AFMC	7W	254	1	
Hill AFB	UT	AFMC	8L	344	1	
Kirtland AFB	NM	AFMC	8Y	333	1	
Los Angeles AFB	CA	AFMC	9D	102	1	
Robins AFB	GA	AFMC	9R	633	1	
Tinker AFB	OK	AFMC	9V	409	1	
Wright-Patterson AFB	ОН	AFMC	9X	725	1	
ARPC Denver	СО	AFRC	5H	0	0	
Dobbins AFB	GA	AFRC	6R	0	0	
Ft. Worth NAS	TX	AFRC	4R	0	0	
General Mitchell IAP	WI	AFRC	6M	0	0	

APPENDIX C - NON-APPROPRIATED FUND SOFTWARE DISTRIBUTION LIST

Base	State	Cmd	CCP O ID	Proj FY01 Svc Pop	Number of Licenses	Number of Supervisor/ Designer Modules
Grissom AFB	IN	AFRC	5B	0	0	
Homestead AFB	FL	AFRC	5D	0	0	
March AFB	CA	AFRC	5K	0	0	
Minneapolis-St. Paul IAP	MN	AFRC	7S	0	0	
New Orleans NAS	LA	AFRC	6P	0	0	
Niagara Falls IAP-ARS	NY	AFRC	6Q	0	0	
Pittsburgh IAP	PA	AFRC	6T	0	0	
Portland IAP	OR	AFRC	9W	0	0	
Westover AFB	MA	AFRC	42	0	0	
Willow Grove ARS	PA	AFRC	6L	0	0	
Youngstown MAP	OH	AFRC	6N	0	0	
Hurlburt Field	FL	AFSOC	8I	300	1	
Buckley ANGB	CO	AFSPC	6V	64	0	
F E Warren AFB	WY	AFSPC	4Z	194	1	
Maelstrom AFB	MT	AFSPC	5J	136	1	
Onizuka AFB	CA	AFSPC	7T	0	0	
Patrick AFB	FL	AFSPC	5R	353	1	
Peterson AFB	СО	AFSPC	6X	405	1	
Vandenberg AFB	CA	AFSPC	5Z	294	1	
Andrews AFB	DC	AMC	8Q	581	1	
Charleston AFB	SC	AMC	4U	258	1	
Dover AFB	DE	AMC	4W	220	1	
Fairchild AFB	WA	AMC	4Y	280	1	
Grand Forks AFB	ND	AMC	6O	182	1	
MacDill AFB	FL	AMC	5I	410	1	
McChord AFB	WA	AMC	5M	378	1	
McConnell AFB	KS	AMC	7Q	222	1	
McGuire AFB	NJ	AMC	5N	342	1	
Pope AFB	NC	AMC	5T	226	1	
Scott AFB	IL	AMC	9S	432	1	
Travis AFB	CA	AMC	5X	458	1	
Andersen AFB Guam	PAC	PACAF	8D	243	1	
Eielson AFB	AK	PACAF	9E	335	1	
Elmendorf AFB	AK	PACAF	9M	458	1	
Hickam AFB	HI	PACAF	9Q	719	1	
Kadena AB Japan	PAC	PACAF	8T	733	1	
Misawa AB Japan	PAC	PACAF	9T	389	1	
Osan AB Korea (Kunsan)	PAC	PACAF	9K	118	1	
Yokota AB Japan	PAC	PACAF	9Y	361	1	
Aviano AB Italy	EUR	USAFE	6Y	230	1	
Croughton England	EUR	USAFE		40	1	
RheinMain AB Germany	EUR	USAFE		174	1	
Alconbury AB England	EUR	USAFE		1	1	
Incirlik AB Turkey (Izmir)	EUR	USAFE	8S	112	1	
Izmir AB Turkey	EUR	USAFE		4		

APPENDIX C - NON-APPROPRIATED FUND SOFTWARE DISTRIBUTION LIST

Base	State	Cmd	CCPO ID	Proj FY01 Svc Pop	Number of Licenses	Number of Supervisor/ Designer Modules
Lajes	AZORES	USAFE	9A	44	1	
Mildenhall RAF Sta UK	EUR	USAFE	9G	362	1	
Ramstein AB Ger	EUR	USAFE	9N	1285	1	
Spangdahlem AB Ger	EUR	USAFE	7N	399	1	
Sembach AB Ger	EUR	USAFE		N/A	0	
Bolling AFB	Wash DC	AFDW		368	1	
Base Total:				25351	77	0
MAJCOM						
ACC (Langley AFB)	VA	ACC		4310	1	
AETC (Randolph AFB)	TX	AETC		4548	1	
AFMC (Wright-Patterson AFB)	ОН	AFMC		3879	1	
AFRC (Robins AFB)	GA	AFRC		598	1	
AFSOC (Hurlburt Field)	FL	AFSOC		300	0	
AFSPC (Peterson AFB)	СО	AFSPC		1446	1	
AMC (Scott AFB)	IL	AMC		3989	1	
USAF Academy (Colorado Springs)	СО	USAFA		548	0	
PACAF (Hickam AFB)	HI	PACAF		3356	1	
USAFE (Ramstein AB)	GE	USAFE		2607	1	
MAJCOM Total:					8	
Air Staff/AFSVA						
AF/ILV	Wash DC				1	
AFSVA	TX				5	5
Air Staff/AFSVA Total:					6	5
GRAND TOTAL:				25351	91	5